

4.2 GRAPHING LINEAR EQUATIONS

Solution of an Equation - an ordered pair that makes the equation true.

Check the Solution:

Ex 1 $2y - 4x = 8$, $(-2, 8)$

$$2(8) - 4(-2) = 8$$

$$16 + 8 = 8$$

$$24 \neq 8 \quad \boxed{\text{NO}}$$

Ex 2 $y = -2$, $(3, -2)$

$$-2 = -2 \quad \boxed{\text{YES}}$$

Homework:

p. 214 #12-34 even

FIND 3 different ordered pairs that are solutions

Use $x = -1, 0, 1$

Ex 1 $y = 3x - 5$

$$y = 3(-1) - 5$$

$$y = -3 - 5$$

$$y = -8 \quad \boxed{(-1, -8)}$$

$$y = 3(0) - 5$$

$$y = 0 - 5$$

$$y = -5 \quad \boxed{(0, -5)}$$

$$y = 3(1) - 5$$

$$y = 3 - 5$$

$$y = -2 \quad \boxed{(1, -2)}$$

Rewrite the Equation in function form ($y =$)

Ex 1 $\begin{array}{r} -3x + y = 12 \\ +3x \quad +3x \end{array}$

$$\boxed{y = 3x + 12}$$

$$\begin{array}{r} 5x + 5y = 19 \\ -5x \quad -5x \end{array}$$

$$\frac{5y}{5} = \frac{-5x + 19}{5}$$

Ex 2 $\begin{array}{r} 2x + 3y = 6 \\ -2x \quad -2x \end{array}$

$$\frac{3y}{3} = \frac{-2x + 6}{3}$$

$$\boxed{y = -\frac{2}{3}x + 2}$$

$$\boxed{y = -x + 19/5}$$